

ABSTRACT

This invention provides an optical fiber block that includes an optical-fiber-alignment portion and a stress-reduction-depth portion. In the optical-fiber-alignment portion, a V groove array is arranged to accommodate the non-coated fiber portion of a ribbon fiber. The V groove array is formed by primary and secondary wet-etching processes on a silicon wafer, and further includes first V grooves at both sides and second V grooves different from the first V grooves disposed between the first V grooves. Meanwhile, the stress-reduction-depth portion is formed by another wet etching, extending 10 to a predetermined depth from the optical-fiber-alignment portion, for reducing stress caused by a variation in the coating thickness of the optical fibers.

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